

ABSTRACT

[0056] This invention relates to a method, apparatus, and means for simulating interdependent infrastructures. This may involve selecting a subset of an interdependent infrastructure system, equivalencing the subset, creating a plurality of agents to model with the subset, and simulating multi-scale agent interactions. It may also include selecting subsets based on geographic region or selecting components for two way analysis or simulating across concurrent time, or selecting a plurality of infrastructures to simulate and connecting the infrastructures by screening candidate interconnections and assigning candidates a likelihood of connection, or identifying connections extending outside of the subset and calculating flow limit for each connection extending outside the subset, or creating agents from templates and data for a infrastructure and creating agents at equivalenced connections, or advancing agent conditions through time and re-equivalencing the infrastructure and continuing until a steady state is achieved.